

What is claimed is:

1. A method for quantitatively determining a reducing substance, which comprises reacting a reducing substance in a test specimen with iron (III) ions, reacting iron (II) ions formed by reduction of the iron (III) ions or residual iron (III) ions with a metal indicator which is capable of reacting specifically with the iron (II) ions or the residual iron (III) ions to undergo color development, and carrying out quantitative determination by measuring the degree of color development, wherein a chelating agent which is specific to copper ions is added to the test specimen before the reaction of the reducing substance in the test specimen with the iron (III) ions.
2. The method for quantitatively determining a reducing substance according to Claim 1, wherein the chelating agent which is specific to the copper ions is at least one selected from the group consisting of neocuproine, bathocuproine and salts thereof.
3. The method for quantitatively determining a reducing substance according to Claim 1, wherein at least one of an aluminum salt and a gallium salt is added to the test specimen.
4. The method for quantitatively determining a reducing substance according to Claim 3, wherein an organic acid is further added to the test specimen together with the at least one of an aluminum salt and a gallium salt.

5. The method for quantitatively determining a reducing substance according to Claim 4, wherein the organic acid is tartaric acid.
6. The method for quantitatively determining a reducing substance according to Claim 1, wherein the reducing substance is hydrogen sulfide or sulfide ions.
7. The method for quantitatively determining a reducing substance according to Claim 6, wherein the hydrogen sulfide or sulfide ions are formed by reacting a sulfur-containing amino acid contained in the test specimen with an enzyme which is capable of reacting with the sulfur-containing amino acid to form hydrogen sulfide.
8. The method for quantitatively determining a reducing substance according to Claim 1, wherein the iron (III) ions constitute a complex.
9. The method for quantitatively determining a reducing substance according to Claim 8, wherein an auxiliary agent, which has an ability of coordinating ligands around the iron ions, is further added to the test specimen together with the complex of the iron (III) ions.
10. The method for quantitatively determining a reducing substance according to Claim 1, wherein the test specimen is a biological specimen or an environmental specimen.
11. A reagent for quantitative determination of a reducing substance, which comprises a chelating agent which is specific to copper ions, iron (III) ions, and a metal indicator which is capable of reacting specifically

with iron (II) ions or iron (III) ions to undergo color development.

12. The reagent for quantitative determination of a reducing substance according to Claim 11, wherein the chelating agent specific to the copper ions is at least one selected from the group consisting of neocuproine, bathocuproine and salts thereof.

13. The reagent for quantitative determination of a reducing substance according to Claim 11, which further comprises at least one of an aluminum salt and a gallium salt.

14. The reagent for quantitative determination of a reducing substance according to Claim 13, which further comprises an organic acid.

15. The reagent for quantitative determination of a reducing substance according to Claim 14, wherein the organic acid is tartaric acid.

16. The reagent for quantitative determination of a reducing substance according to Claim 13, which further comprises an enzyme which is capable of reacting with a sulfur-containing amino acid to form hydrogen sulfide.

17. The reagent for quantitative determination of a reducing substance according to Claim 11, wherein the iron (III) ions constitute a complex.

18. The reagent for quantitative determination of a reducing substance according to Claim 17, which further comprises an auxiliary agent which has an ability of

coordinating ligands around the iron ions.

19. The reagent for quantitative determination of a reducing substance according to Claim 1, which comprises a first reagent comprising the copper chelating agent and a second reagent comprising the iron (III) ions and the metal indicator.